

Air Traffic Control

A service operated by appropriate authority to promote the safe, orderly and expeditious flow of air traffic.

Air Route Traffic Control Center

A facility established to provide air traffic control service to aircraft operating on IFR flight plans within controlled airspace and principally during the en route phase of flight.

Airway

A Class E airspace area established in the form of a corridor. The centerline of which is defined by radio navigation aids.

Approach Gate

An imaginary point used within ATC as a basis for vectoring aircraft to the final approach course.

Area Navigation

A method of navigation that permits aircraft operations on any desired course within the coverage of station-referenced navigation signals or within the limits of self-contained system capability.

Category I (CAT I) Precision Approach

A precision approach that provides for approach to a height above touchdown of not less than 200 feet and with runway visual range of not less than 2,400 feet.

Category II (CAT II) Precision Approach

A precision approach that provides for approach to a height above touchdown of not less than 100 feet and with runway visual range of not less than 1.200 feet.

Category III (CAT III) Precision Approach

A precision approach that provides for approach without a decision height minimum and with runway visual range from 700 feet to none.

Close Parallel Runways

Two parallel runways whose extended centerlines are separated by less than 4,300 feet.

Controlled Airspace

An airspace of defined dimensions within which air traffic control service is provided to IFR flights and to VFR flights.

Data Link

A digital communications system that can transmit data from a controller to an aircraft and vice versa.

Departure Procedure

A charted IFR departure procedure.

Distance Measuring Equipment

Ground and airborne equipment designed to measure (in nautical miles) the distance of an aircraft from a navigational aid such as a VOR, VORTAC, OR, TACAN.

Fix

A geographical position determined by visual reference to the surface, by reference to one or more navaids, by celestial plotting, or by another navigational device.

Flight Level

A level of constant atmospheric pressure related to a reference datum of 29.92 inches of mercury. Each is stated in three digits that represent hundreds of feet. For example, flight level 250 represents a barometric altimeter indication of 25,000 feet.

Flight Management System

A computer system that uses a large data base to allow routes to be programmed and fed into the system, which is constantly updated with respect to position accuracy by reference to conventional navigation aids.

Flow Control

Measures designed to adjust the flow of traffic into a given airspace, along a given route, or bound for a given airport so as to ensure the most effective utilization of the airspace.

Glideslope

Provides vertical guidance for aircraft during approach and landing.

Global Positioning System

A space-based radio positioning, navigation and time-transfer system, which provides highly accurate position and velocity information, and precise time, on a continuous global basis.

Ground Delay

The amount of delay attributed to air traffic control, encountered prior to departure.

Ground Stop

Normally, the last initiative to be utilized; this method mandates that the terminal facility will not allow any departures to enter center airspace until further notified.

Handoff

The action taken to transfer the radar identification of an aircraft from one controller to another when the aircraft will enter the receiving controller's airspace and radio communications will be transferred.

Hold Procedures

A predetermined maneuver that keeps aircraft within a specified airspace while awaiting further clearance from air traffic control.

Instrument Flight Rules

Rules governing procedures for conducting instrument flight.

Instrument Landing System

A precision approach and landing aid that normally consists of a localizer, a glideslope, marker beacons, and an approach light system.

Integrity

The ability of a system to provide timely warnings to users when the system should not be used for navigation.

Lateral Navigation

A function of area navigation that calculates, displays, and provides lateral guidance to a profile or path.

Miles-in-Trail

A specified distance between aircraft, normally in the same stratum associated with the same destination or route of flight.

National Airspace System

The common network of U.S. airspace; air navigation facilities, equipment and services; airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, and manpower and material. Included are system components shared jointly with the military.

Navigational Aid

Any visual or electronic device, airborne or on the surface, that provides point-to-point guidance information or position data to aircraft in flight.

Nonprecision Approach

A standard instrument approach in which no electronic guide slope is provided.

Parallel Runways

Two or more runways at the same airport whose centerlines are parallel.

Precision Runway Monitor

Provides air traffic controllers with high precision secondary surveillance radar for aircraft on final approach to parallel runways that have extended centerlines separated by less than 4,300 feet.

Precision Approach

A standard instrument approach in which a course and glideslope/glidepath are provided.

Radio Altimeter

Aircraft equipment that makes use of the reflection of radio waves from the ground to determine the height of the aircraft above the surface.

Reliever Airport

A general aviation airport designated to provide an alternative to commercial service airports in major metropolitan areas.

Required Navigation Performance

A statement of the navigation performance accuracy necessary for operation within a defined airspace, including the operating parameters of the navigation systems used within that airspace.

Sector or Control Sector

An airspace area of defined horizontal and vertical dimensions for which a controller or group of controllers has air traffic control responsibility, normally within a center or terminal area.

Separation

In air traffic control, the spacing of aircraft to achieve their safe and orderly movement in flight and while landing and taking off.

Standard Terminal Arrival

A pre-planned instrument flight rule air traffic control arrival procedure published for pilot use in graphic and/or textural form. STARs provide transition form the en route structure to an outer fix or an instrument approach fix/arrival waypoint in the terminal area.

Threshold

The beginning of that portion of the runway useable for landing.

Traffic Management Unit

The entity in ARTCCs and designated terminals responsible for direct involvement in the active management of travel.

Tower

A terminal facility that uses air/ground communications, visual signaling, and other devices to provide ATC services to aircraft operating in the vicinity of an airport or on the movement area.

TRACON

A terminal ATC facility that uses radar and nonradar capabilities to provide approach control services to aircraft arriving, departing, or transiting airspace controlled by the facility.

Vertical Navigation

A function of area navigation that calculates, displays, and provides vertical guidance to a profile or path.

Visual Flight Rules

Rules that govern the procedures for conducting flight under visual conditions.

Vortex or Wake Vortex

A circular pattern of air created by the movement of an airfoil through the air when generating lift.

Waypoint

A predetermined geographical position used for route/instrument approach definition and other navigational purposes that is defined relative to a VORTAC station or in terms of latitude/longitude coordinates.